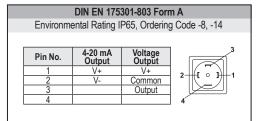
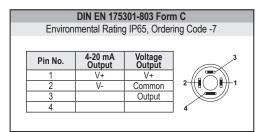
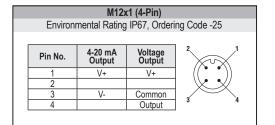
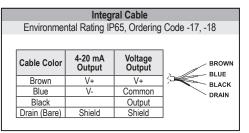
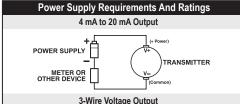
Electrical Connector Terminal Wiring and Pinout

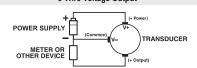












V+= Supply voltage
V-= 4 mA to 20 mA signal
Output = Voltage Output signal
Common = Supply voltage return/ground

Load Limitations

4 mA to 20 mA output only

Vmin = $8V + (.020 \times RL)$

RL = RS + RW

RL = Loop resistance (ohms)
RS = Sense resistance (ohms)
RW = Wire resistance (ohms)

| Output Signal | Min Supply | Max Supply | Max Current Consumption |
|----------------------------|---------------|---------------|----------------------------|
| 4 mA to 20 mA | 8 Vdc | 30 Vdc | 25 mA |
| 0 Vdc to 5 Vdc | 8 Vdc | 30 Vdc | 8 mA |
| 1 Vdc to 5 Vdc | 8 Vdc | 30 Vdc | 8 mA |
| 0 Vdc to 10 Vdc | 14 Vdc | 30 Vdc | 8 mA |
| 0.5 to 4.5 Vdc | 8 Vdc | 30 Vdc | 8 mA |
| 0.5 to 4.5 Vdc ratiometric | 4.5 Vdc | 5.5 Vdc | 8 mA |

Technical Specifications Related To Safety

See product label for specific product input (voltage), output (voltage or current), and pressure ranges.

Temperature

Ranges

Compensated 32 °F to 176 °F (0 °C to 80 °C) Media 32 °F to 176 °F (0 °C to 80 °C) Ambient 32 °F to 176 °F (0 °C to 80 °C) Storace -40 °F to 158 °F (-40 °C to 70 °C)

Ratings Terminal Wiring and Pinout)

Shock 500 g's according to IEC 60068-2-27

Vibration 10 g's according to IEC 60068-2-6

±0.53% of span, including non-linearity best fit straight line, hysteresis, and non-repeatability per IEC 61298-2 at reference conditions

Non-Linearity
Hysteresis
Non-repeatability
0.50%
0.16%
0.10%

Uncertainty = √ (Non-linearity)²+(Hysteresis)²+(Non-repeatability)²







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PT20UM-23



User Manual

PT20 Series General Purpose Fixed Range Transmitter



✓ WARNING

Please read the entire user manual for safe use of product.

NOTE: If NOSHOK PT20 general purpose pressure transmitters are used in a manner not specified in this manual, the protection provided by the equipment may be impaired.

NOTE: The safety of the system is the responsibility of the assembler of the system. See www.noshok.com for further product detail and documentation...

on the wrench flats of the hex.

General Description
NOSHOK PT20 pressure transmitters are high performance instruments intended for use in industrial applications where the process media is compatible with the 316 Stainless Steel wetted parts and system temperatures and pressure are within the limits specified herein.

tomporata.

Installation

NOSHOK PT20 pressure transmitters require no special mounting hardware and can be mounted in any orientation with negligible

position error.

Although the units can withstand considerable vibration without damage or significant output effects, it is always good practice to mount the transmitter where there is minimum vibration. Refer to product specification for allowable shock and vibration conditions. For units with NPT type pressure fittings apply sealing tape or an equivalent sealant to the threads before installing. When installing or removing the unit apply a wrench to the hex wrench

flats, located above the pressure fitting. A 27 mm wrench can be used

Mating connection cable assemblies are available as an accessory part from NOSHOK. Refer to Electrical Connector Terminal Wiring and Pinout for additional detail.

A pressure snubber may be installed to eliminate damaging hammer effects. Water and conventional cleaning detergents are acceptable cleaning agents. Cleaning with unsuitable cleaning agents may damage the instrument or the product label. Do not use any aggressive chemical agents or abrasive cloths or sponges.

Transmitter should be electrically common with earth via the process connection.

- Refer to Power Supply Requirements and Ratings.
- Refer to Electrical Connector Terminal Wiring and Pinout.
- Refer to product technical specification for allowable minimum and maximum temperature and pressure conditions.

General Operation

Pressure spikes in excess of the rated overpressure capability of the transmitter may cause irreversible electrical and/or mechanical damage to the pressure measuring and containing elements. Fluid hammer and surges can destroy any pressure transmitter and must always be avoided

Maintenance and Service

NOSHOK PT20 pressure transmitters are precisely calibrated, and temperature compensated at the factory to ensure long and stable performance.

There are no field accessible adjustments. This product is maintenance free. Repairs should only be carried out by the manufacturer.

nco. repairs sno

Additional Notes

Any electrical device may be susceptible to damage when exposed to static electrical charges. To avoid damage to the transmitter, observe the following:

- The circuitry of the NOSHOK PT20 pressure transmitters is designed to minimize the effect of electromagnetic and radio frequency interference. To minimize susceptibility to noise, avoid running the termination wiring in a conduit which contains high current AC power cables.
- Where possible avoid running the termination wiring near inductive equipment.

NOTE: The shield and drain wire in the cable (if supplied) is not connected to the transmitter body and is not a suitable ground.